



General Assembly

January Session, 2001

***Raised Bill No. 1400***

LCO No. 4726

Referred to Committee on Environment

Introduced by:  
(ENV)

***AN ACT CONCERNING DEPARTMENT OF ENVIRONMENTAL  
PROTECTION CLEAN AIR REGULATIONS.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- 1       Section 1. (NEW) For purposes of this section:
- 2       (1) "Affected state" has the same meaning as the term "affected
- 3       states" in section 22a-174-33(a)(3) of the Regulations of Connecticut
- 4       State Agencies.
- 5       (2) "Affected unit" means any emissions unit subject to the
- 6       provisions of section 22a-174-22b of the Regulations of Connecticut
- 7       State Agencies, the Post-2002 Nitrogen Oxides Budget Program.
- 8       (3) "Average emissions rate" means a determination of the rate of
- 9       SO<sub>2</sub> emissions, measured in pounds of SO<sub>2</sub> per MMBtu, in any
- 10      calendar quarter from either a single affected unit or from two or more
- 11      affected units. Average emissions rate for a single unit is calculated by
- 12      dividing the total quarterly SO<sub>2</sub> emissions, in pounds, from such unit
- 13      by the total quarterly heat input, in MMBtu, for such unit. Average
- 14      emissions rate for two or more units is calculated by dividing the total

15     quarterly SO<sub>2</sub> emissions, in pounds, from all such units by the total  
16     quarterly heat input, in MMBtu, for all such units.

17     (4) "Calendar quarter" means the period of January first to March  
18     thirty-first, inclusive, April first to June thirtieth, inclusive, July first to  
19     September thirtieth, inclusive or October 1 to December 31, inclusive.

20     (5) "Connecticut State SO<sub>2</sub> Retirement Account" means a general  
21     allowance tracking system account established by the commissioner  
22     under 40 CFR 73.31 for the purpose of permanently holding SO<sub>2</sub>  
23     allowances retired by the owners or operators of affected units in  
24     accordance with the provisions of subsection (d) of this section.

25     (6) "Continuous emissions monitoring system" or "CEMS" means  
26     any equipment used to sample, analyze and measure SO<sub>2</sub> emissions to  
27     provide a permanent record of such emissions expressed in pounds  
28     per MMBtu.

29     (7) "Emissions unit" has the same meaning as in Regulations of  
30     Connecticut State Agencies section 22a-174-33(a)(7).

31     (8) "Early reduction credit" means a reduction of SO<sub>2</sub> during  
32     calendar years 1999, 2000, 2001 or 2002 below the most stringent SO<sub>2</sub>  
33     emission rate applicable to an affected unit pursuant to subparagraph  
34     (B) of subdivision (5) of subsection (f) of section 3 of this act.

35     (9) "Generation period" means the period of time during which  
36     reductions in emissions of an air pollutant are implemented.

37     (10) "MMBtu" means million BTU of heat input.

38     (11) "Retire" or "retirement" when referring to SO<sub>2</sub> allowances,  
39     means the permanent withdrawal of SO<sub>2</sub> allowances by the  
40     Environmental Protection Agency Administrator from any allowance  
41     tracking system account to the Connecticut SO<sub>2</sub> Allowance Retirement  
42     Account in an amount equal to the number of tons of SO<sub>2</sub> emitted by  
43     each affected unit.

44 (12) "Sulfur dioxide" or "SO<sub>2</sub>" means a gas that at standard  
45 conditions has the molecular form SO<sub>2</sub>.

46 (13) "Sulfur Dioxide Discrete Emission Reduction Credit" or "SO<sub>2</sub>  
47 DERC" means the reduction of one ton of sulfur dioxide at a stationary  
48 source during the generation period, which the commissioner has  
49 certified in writing as real, quantifiable, surplus, permanent and  
50 enforceable. Early reduction credits shall qualify as SO<sub>2</sub> DERCs.

51 (14) "Title IV SO<sub>2</sub> allowance" or "SO<sub>2</sub> allowance" means an  
52 authorization allocated to a Title IV source by the Administrator,  
53 pursuant to Title IV of the federal Clean Air Act (42 USC 7651d, et seq.)  
54 and 40 CFR Parts 72 and 73, to emit up to one ton of SO<sub>2</sub> during or  
55 after a specified calendar year.

56 (15) "Title IV source" means an affected unit that is also subject to  
57 Phase II of the acid rain control requirements set forth in Title IV of the  
58 federal Clean Air Act (42 USC 7651d, et seq.).

59 Sec. 2. (NEW) This act shall apply to the owner or operator of any  
60 affected unit.

61 Sec. 3. (NEW) (a) On and after January 1, 2002, and except as  
62 provided in subsection (d) of this section, the owner or operator of an  
63 affected unit or units shall:

64 (1) Combust liquid fuel, gaseous fuel, or a combination of each,  
65 provided that each fuel possesses a fuel sulfur limit of equal to or less  
66 than 0.5 % sulfur, by weight (dry basis);

67 (2) Meet an average emission rate of equal to or less than 0.55  
68 pounds SO<sub>2</sub> per MMBtu for each calendar quarter for an affected unit  
69 at the premises; or

70 (3) Meet an average emission rate of equal to or less than 0.5 pounds  
71 SO<sub>2</sub> per MMBtu calculated for each calendar quarter, if such owner or  
72 operator averages the emissions from two or more affected units at the

73 premises.

74 (b) (1) No later than the following March first, for each calendar year  
75 commencing January 1, 2002, the owner or operator of each affected  
76 unit that is also a Title IV source shall retire one SO<sub>2</sub> allowance,  
77 rounded up to the next whole ton, for each ton of SO<sub>2</sub> emitted in the  
78 state of Connecticut. This requirement is in addition to any other  
79 requirements imposed on the owner or operator of a Title IV source by  
80 the Environmental Protection Agency Administrator under 40 CFR  
81 Parts 72 and 73.

82 (2) The owner or operator of an affected unit shall retire the  
83 necessary amount of SO<sub>2</sub> allowances by requesting that the  
84 Environmental Protection Agency Administrator transfer such  
85 allowances to the Connecticut State SO<sub>2</sub> Retirement Account  
86 established by the commissioner pursuant to 40 CFR 73.31 and  
87 administered by the federal Environmental Protection Agency under  
88 the provisions of 40 CFR Parts 72 and 73. The transfer of SO<sub>2</sub>  
89 allowances in accordance with the provisions of this subdivision shall  
90 occur by March first for emissions occurring in the previous calendar  
91 year.

92 (3) Any SO<sub>2</sub> allowance retired in accordance with the provisions of  
93 this subsection shall be an allowance originally issued by the  
94 Environmental Protection Agency Administrator to a Title IV source  
95 located in the state of Connecticut or in any affected state.

96 (c) Notwithstanding the provisions of subsection (b) of this section  
97 and except as provided in subsection (f) of this section, this subsection  
98 shall apply, on and after January 1, 2003, to the owner or operator of a  
99 Title IV source that is also an affected unit or units. On and after  
100 January 1, 2003, such owner or operator shall:

101 (1) Combust liquid fuel, gaseous fuel, or a combination of each,  
102 provided that each fuel possesses a fuel sulfur limit of equal to or less  
103 than 0.3 % sulfur, by weight (dry basis);

104       (2) Meet an average emission rate of equal to or less than 0.33  
105       pounds SO<sub>2</sub> per MMBtu for each calendar quarter for an affected unit  
106       at a premises;

107       (3) Meet an average emission rate of equal to or less than 0.3 pounds  
108       SO<sub>2</sub> per MMBtu calculated for each calendar quarter, if such owner or  
109       operator averages the emissions from two or more affected units at a  
110       premises; or

111       (4) Meet an average emission rate equal to or less than 0.3 pounds  
112       SO<sub>2</sub> per MMBtu calculated for each calendar quarter in accordance  
113       with the provisions of subsection (f) of this section, provided that each  
114       affected unit or units: (A) Combusts liquid fuel, gaseous fuel, or a  
115       combination of each, provided that each fuel possesses a fuel sulfur  
116       limit of equal to or less than 0.5 % sulfur, by weight (dry basis), or (B)  
117       meets an actual quarterly average emission rate that does not exceed  
118       0.55 pounds SO<sub>2</sub> per MMBtu.

119       (d) (1) The commissioner may authorize an extension, to expire no  
120       later than June 1, 2003, to comply with the requirements of subsection  
121       (a) or (c) of this section upon the request of an owner or operator of an  
122       affected unit provided such request is filed with the commissioner no  
123       later than one hundred twenty days before the applicable compliance  
124       date of subsection (c) or (e) of this section.

125       (2) Before granting or denying a request for an extension pursuant  
126       to subdivision (1) of this subsection, the commissioner shall make a  
127       finding, after consultation with the Department of Public Utility  
128       Control, to determine whether the provisions of this section will  
129       substantially impact the reliable generation or delivery of electricity to  
130       residential, commercial and industrial users in the state. The  
131       commissioner may hold a public hearing prior to granting or denying  
132       such request for an extension.

133       (3) The commissioner may impose conditions and limitations by  
134       permit or order when granting a request for an extension under

135 subdivision (1) of this subsection.

136 (4) Any extension authorized under subdivision (1) of this  
137 subsection shall require that the owner or operator of an affected unit,  
138 through a permit or order, comply with the requirements of subsection  
139 (a) or (c) of this section by reconstructing the existing affected unit,  
140 replacing the existing affected unit with a new source or submitting to  
141 an emissions cap. The commissioner may require such emissions cap  
142 be equivalent to, or less than, the quantity of emissions that would  
143 have been emitted had the source complied with the requirements of  
144 subsection (a) or (c) of this section. Any emissions cap shall expire no  
145 later than June 1, 2003 and any reconstruction or replacement shall be  
146 completed no later than June 1, 2003.

147 (5) The extension provided by this subsection shall not relieve the  
148 owner or operator of an affected source of the requirements to comply  
149 with any applicable provision of this section, including subsection (b)  
150 of this section.

151 (e) (1) The commissioner may suspend the requirements of  
152 subdivision (1) of subsection (a) of this section or subdivision (1) of  
153 subsection (c) of this section for the owner or operator of any affected  
154 unit using a low-sulfur fuel. Such suspension shall be made only when  
155 the commissioner finds that the availability of fuel that complies with  
156 such requirements is inadequate to meet the needs of residential,  
157 commercial and industrial users in this state and that such inadequate  
158 supply constitutes an emergency.

159 (2) The commissioner shall specify in writing the period of time for  
160 which the suspension described in subdivision (1) of this subsection  
161 shall be in effect.

162 (3) No later than thirty days after the termination of any suspension  
163 of fuel sulfur limits made pursuant to this subsection, the owner or  
164 operator of an affected unit or units shall report to the commissioner in  
165 writing the amount of SO<sub>2</sub> emissions in excess of those that would

166 have occurred had the use of compliant fuel at the affected source not  
167 been interrupted. If such excess SO<sub>2</sub> emissions from any premises  
168 exceeds fifty tons, the commissioner may require that the owner or  
169 operator of such affected unit or units offset such SO<sub>2</sub> emissions  
170 through the use of emission reduction trading in accordance with the  
171 provisions of subsection (f) of this section.

172 (f) (1) The owner or operator of an affected unit may use SO<sub>2</sub> DERCS  
173 or SO<sub>2</sub> allowances to comply with the applicable emission limitations  
174 set forth in subdivision (4) of subsection (c) of this section pursuant to  
175 a permit or order issued by the commissioner.

176 (2) Such owner or operator shall retire one (1) SO<sub>2</sub> DERC for each  
177 ton or part thereof of SO<sub>2</sub> emitted in excess of the applicable emission  
178 limitation in subsection (e)(4) of this section. In the alternative, an  
179 owner or operator may retire four (4) SO<sub>2</sub> allowances for each ton or  
180 part thereof of SO<sub>2</sub> emitted in excess of the applicable emission  
181 limitation in subdivision (4) of subsection (c) of this section.

182 (3) Any creation or use of SO<sub>2</sub> DERCS for the purpose of this  
183 subsection shall be consistent with the provisions of 40 CFR 51,  
184 Subpart U and the U.S. Environmental Protection Agency's "Emission  
185 Trading Policy Statement," published December 4, 1986 (Federal  
186 Register, Volume 51, page 43814).

187 (4) The owner or operator of any affected facility using SO<sub>2</sub>  
188 allowances as a means of compliance with the provisions of this  
189 subsection and subdivision (4) of subsection (c) of this section shall  
190 ensure that such allowances were originally issued by the  
191 Environmental Protection Agency Administrator to a Title IV source  
192 located in the state of Connecticut or in any affected state.

193 (5) The owner or operator of any affected unit that reduces SO<sub>2</sub>  
194 emissions for the purpose of generating early reduction credits or SO<sub>2</sub>  
195 DERCS may request that the commissioner approve such early  
196 reductions in writing by permit or order provided that such reductions

197 are: (A) Real, quantifiable, surplus, permanent and enforceable; and (B)  
198 based on an emissions rate that is the most stringent of: (i) 0.3 pounds  
199 SO<sub>2</sub> per MMBtu, or (ii) permitted allowable emissions of the affected  
200 unit.

201 (g) (1) The owner or operator of an affected unit who demonstrates  
202 compliance with this section by meeting the applicable fuel sulfur  
203 limits of subdivision (1) of subsection (a) of this section or subdivision  
204 (1) of subsection (c) of this section shall make and keep records in  
205 accordance with the following:

206 (A) If fuel with sulfur content not exceeding an applicable fuel  
207 sulfur limit is the only fuel purchased and combusted by an affected  
208 unit, then the owner or operator shall make and keep records that  
209 demonstrate the fuel sulfur content of each shipment of fuel received;  
210 or

211 (B) If fuel with sulfur content above any applicable limit is blended  
212 at the premises for combustion in an affected unit or units, the owner  
213 or operator shall make and keep daily records demonstrating that all  
214 fuel combusted at the affected unit or units meets the applicable fuel  
215 sulfur limits of subdivision (1) of subsection (a) of this section or  
216 subdivision (1) of subsection (c) of this section. Fuel sulfur analysis  
217 shall be conducted in accordance with the American Society for  
218 Testing and Material (ASTM) test method D4294 and automatic  
219 sampling equipment shall conform to ASTM test method D4177-82.  
220 (Copies of ASTM test methods D4294 and D4177-82 may be obtained  
221 from the Department of Environmental Protection, Bureau of Air  
222 Management, 79 Elm Street, 5<sup>th</sup> floor, Hartford, CT 06106-5127; (860)  
223 424-3027).

224 (2) The owner or operator of an affected unit who demonstrates  
225 compliance with this section by meeting the average SO<sub>2</sub> emission rate  
226 limits of subdivision (2) or (3) of subsection (a) of this section or  
227 subdivision (2), (3) or (4) of subsection (c) of this section shall make  
228 and keep records in accordance with the following:



229 (A) For affected units that are also Title IV sources, hourly SO<sub>2</sub>  
230 emission rate values determined from data measured by a CEMS in  
231 accordance with the applicable provisions of 40 CFR 75;

232 (B) For affected units that are not Title IV sources: (i) Hourly SO<sub>2</sub>  
233 emission rate values determined from data measured by a CEMS in  
234 accordance with the applicable provisions of either 40 CFR Parts 60 or  
235 75, or (ii) if any affected unit does not have a CEMS in accordance with  
236 either 40 CFR Parts 60 or 75, then hourly SO<sub>2</sub> emission rate values  
237 determined from data measured by a CEMS or other monitoring  
238 system; and

239 (C) For all affected units, quarterly facility SO<sub>2</sub> emission rate  
240 averages, determined by dividing total quarterly SO<sub>2</sub> emissions by  
241 total quarterly heat input values for all affected units at the facility.

242 (3) The owner or operator of an affected unit shall keep the records  
243 specified in subdivision (1) or (2) of this subsection at the premises for  
244 a period of five years. Such records need not be maintained for  
245 distillate oil, motor vehicle fuel, aircraft fuel, or gaseous fuel, provided  
246 such fuels have a sulfur content below 0.3 per cent by weight (dry  
247 basis) and are the only fuels combusted at the affected unit. This  
248 exemption shall not apply when such fuels are combusted in  
249 combination with other fuels having sulfur contents above 0.3 per cent  
250 by weight (dry basis).

251 (h) (1) The owner or operator of an affected unit for which the  
252 commissioner has issued a final Title V permit shall, as part of any  
253 compliance certification pursuant to section 22a-174-33(q)(2) of the  
254 Regulations of Connecticut State Agencies, certify in writing to the  
255 commissioner compliance with the applicable provisions of this  
256 section. Such certification shall include actual quarterly SO<sub>2</sub> emissions  
257 in tons and either average quarterly fuel sulfur content or average  
258 quarterly emission rate, whichever is applicable, for each affected unit.

259 (2) The owner or operator of an affected unit for which the

260 commissioner has not issued a final Title V permit shall certify in  
261 writing to the commissioner that such owner or operator is in  
262 compliance with the applicable provisions of this section on or before  
263 March first of each year for the previous calendar year. Such  
264 certification shall include actual quarterly SO<sub>2</sub> emissions in tons and  
265 either average quarterly fuel sulfur content or average quarterly  
266 emission rate, whichever is applicable, for each affected unit.

267 (i) (1) Notwithstanding any provision of this section, if the owner or  
268 operator of an affected unit is subject to a more stringent emission  
269 standard or limitation imposed by order, permit or other applicable  
270 law, such owner or operator shall comply with the most stringent  
271 emission limitation or standard.

272 (2) Notwithstanding any provision of this section, if the owner or  
273 operator of an affected unit is subject to additional monitoring or  
274 reporting requirements imposed by order, permit or other applicable  
275 law, such owner or operator shall comply with the additional  
276 monitoring or reporting requirements.

277 Sec. 4. (NEW) For purposes of sections 4 to 15, inclusive, of this act  
278 the following definitions shall apply:

279 (1) "Contract" means: (A) An agreement between a utility and a  
280 customer (or other person) to provide electricity; or (B) a change in any  
281 agreement between a utility and a customer or other person to provide  
282 electricity.

283 (2) "Electricity supplier" means "electric supplier", as defined in  
284 subdivision (30) of subsection (a) of section 16-1 of the general statutes  
285 and "municipal electric utility", as defined in subdivision (8) of section  
286 7-233b of the general statutes.

287 (3) "Emergency engine" means a stationary reciprocating engine or a  
288 turbine engine which is used as a means of providing mechanical or  
289 electrical power only during periods of testing and scheduled

290 maintenance or during either an emergency or in accordance with a  
291 contract intended to ensure an adequate supply of electricity for use  
292 within the state of Connecticut during the loss of electrical power  
293 derived from nuclear facilities. The term does not include an engine for  
294 which the owner or operator of such engine is party to any other  
295 agreement to sell electrical power from such engine to an electricity  
296 supplier, or otherwise receives any reduction in the cost of electrical  
297 power for agreeing to produce power during periods of reduced  
298 voltage or reduced power availability.

299 (4) "Emergency" means an unforeseeable condition that is beyond  
300 the control of the owner or operator of an emergency engine and that:

301 (A) Results in an interruption of electrical power from the electricity  
302 supplier to the premises;

303 (B) Results in a deviation of voltage from the electricity supplier to  
304 the premises of three per cent above or five per cent below standard  
305 voltage in accordance with subsection (a) of section 16-11-115 of the  
306 Regulations of Connecticut State Agencies;

307 (C) Requires an interruption of electrical power from the electricity  
308 supplier to the premises enabling the owner or operator to perform  
309 emergency repairs; or

310 (D) Requires operation of the emergency engine to minimize  
311 damage from fire, flood or any other catastrophic event, natural or  
312 man-made.

313 (5) "Gas" or "gaseous fuel" means natural gas, propane, or any other  
314 fuel that is in the gaseous state under standard conditions.

315 (6) "gm/bk hp-hr" means grams per brake horsepower-hour.

316 (7) "lb" means pound.

317 (8) "MMBTU" means million BTU of heat input.

- 318       (9) "MMBTU/hr" means million BTU of heat input per hour.
- 319       (10) "MRC" means maximum rated capacity.
- 320       (11) "Major stationary source of Nox" means a premises with  
321 potential emissions of NOx equal to or greater than fifty tons per year  
322 in a serious nonattainment area for ozone, or twenty-five tons per year  
323 in a severe nonattainment area for ozone.
- 324       (12) "NOx Budget program source" means: (A) A fossil-fuel-fired  
325 stationary source that serves a generator with a nameplate capacity of  
326 fifteen megawatts (15 MW) or more; or (B) A fossil-fuel-fired boiler or  
327 indirect heat exchanger with a maximum heat input capacity of two  
328 hundred fifty MMBTU or more.
- 329       (13) "NOx discrete emission reduction credit" or "NOx DERC"  
330 means the reduction of one ton NOx at a source during a discrete  
331 period of time, which the commissioner has determined as real,  
332 quantifiable, surplus, permanent and enforceable.
- 333       (14) "Other boiler" means a boiler that is not a cyclone furnace, fast-  
334 response double-furnace naval boiler or fluidized-bed combustor.
- 335       (15) "Other oil" means a fuel that is liquid at standard conditions  
336 and is not residual oil.
- 337       (16) "ppmvd" means parts per million by volume on a dry basis.
- 338       (17) "Premises" has the same meaning as "premise" in section 22a-  
339 174-1 of the Regulations of Connecticut State Agencies.
- 340       (18) "Reciprocating engine" means a stationary internal combustion  
341 engine having a crankshaft turned by linearly reciprocating pistons.
- 342       (19) "Selective noncatalytic reduction" means emission control  
343 technology that involves the injection of a chemical reagent at high flue  
344 gas temperatures to selectively reduce NOx emissions to nitrogen and  
345 water.

346       (20) "Turbine engine" means a stationary internal combustion  
347 engine that continuously converts an air-fuel mixture into rotational  
348 mechanical energy through the use of moving vanes attached to a  
349 rotor.

350       (21) "Waste combustor" means an incinerator, as defined in section  
351 22a-174-18(c) of the Regulations of Connecticut State Agencies, a  
352 resources recovery facility, as defined in section 22a-207 of the general  
353 statutes, or a sewage sludge incinerator. The term does not include a  
354 flare or an industrial fume incinerator.

355       Sec. 5. (a) This section applies to the owner or operator of:

356       (1) Any of the following sources, provided such sources are located  
357 at a major stationary source of nitrogen oxide:

358       (A) A reciprocating engine with a maximum rated capacity of three  
359 MMBTU/hr or more;

360       (B) Fuel-burning equipment, other than a reciprocating engine, with  
361 a maximum rated capacity of five MMBTU/hr or more;

362       (C) Equipment that COMBUSTS fuel for heating materials and that  
363 has a maximum rated capacity of five MMBTU/hr or more;

364       (D) A waste combustor with a design capacity of two thousand  
365 pounds or more of waste per hour; or

366       (2) Fuel-burning equipment, a waste combustor, or a process source  
367 that has potential emissions of nitrogen oxide in excess of the  
368 following:

369       (A) One hundred thirty-seven pounds during any day from May  
370 first to September thirtieth, inclusive, of any year, if such source is  
371 located in a severe nonattainment area for ozone; or

372       (B) Two hundred seventy-four pounds during any day from May  
373 first to September thirtieth, inclusive, of any year, if such source is

374 located in a serious nonattainment area for ozone.

375 (b) Subdivisions (7) to (13), inclusive, of subsection (a) of this section  
376 shall not apply to the owner or operator of a source if the actual  
377 emissions of NO<sub>x</sub> since January 1, 1990, from the premises at which  
378 such source is located have not exceeded twenty-five tons in any  
379 calendar year if such premises are located in a severe nonattainment  
380 area for ozone, or fifty tons in any calendar year if such premises are  
381 located in a serious nonattainment area for ozone. Notwithstanding  
382 this provision, subdivisions (7) to subsection (13), inclusive, of  
383 subsection (a) of this section shall apply to such owner or operator if,  
384 after May 31, 1995, actual emissions of NO<sub>x</sub> from such premises exceed  
385 the following:

386 (1) In any calendar year: Twenty-five tons for premises located in a  
387 severe nonattainment area for ozone, or fifty tons for premises located  
388 in a serious nonattainment area for ozone; or

389 (2) On any day from May first to September thirtieth, inclusive, of  
390 any year: One hundred thirty-seven pounds for premises located in a  
391 severe nonattainment area for ozone or two hundred seventy-four  
392 pounds for premises located in a serious nonattainment area for ozone.

393 (c) Subdivisions (7) to (13), inclusive, of subsection (a) this section  
394 shall not apply to the owner or operator of an emergency engine. In  
395 addition, the actual emissions from emergency engines operating  
396 during an emergency shall not be included in the determination of the  
397 applicability of subdivision (2) of subsection (b) of this section.

398 (d) The owner or operator of an emergency engine shall not include  
399 the actual emissions from any such engine for purposes of determining  
400 applicability in accordance with subdivision (2) of subsection (b) of  
401 this section, provided such emissions result from operation in  
402 accordance with a contract with a utility operating pursuant to a  
403 permit or order which:

404       (1) Requires the permittee to maintain a list which identifies all  
405       sources with whom the permittee has a contract;

406       (2) Requires either the permittee or the owner or operator of the  
407       emergency engine to record and submit to the Commissioner data on  
408       fuel consumption and hours of operation of any emergency engine  
409       operating under such contract; and

410       (3) Requires the permittee to obtain NOx emission reductions to  
411       offset the NOx emissions that result from the generation of customer-  
412       contracted electricity.

413       (e) Notwithstanding subsection (c) of this section, subdivisions (7) to  
414       (13), inclusive of subsection (a) of this section shall apply to the owner  
415       or operator of an emergency engine if, after May 1, 1997, such engine  
416       operates for routine, scheduled testing or maintenance on any day for  
417       which the commissioner has forecast that ozone levels will be  
418       "moderate to unhealthful", "unhealthful" or "very unhealthful." The  
419       commissioner may exempt, by permit or order, the owner or operator  
420       of an emergency engine from this subdivision, if such emergency  
421       engine is unattended, the testing is automated and cannot be modified  
422       from a remote location.

423       Sec. 6. This section shall not apply to the owner or operator of a  
424       mobile source.

425       Sec. 7. (NEW) (a) On and after May 31, 1995, the owner or operator  
426       of a stationary source subject to this section shall: (1) Comply with all  
427       applicable emission limitations for such source in section 8 of this act;  
428       (2) comply with the provisions for multi-fuel sources in section (9) of  
429       this act; (3) reduce the NOx emission rate from such source by forty  
430       per cent, pursuant to section (10) of this act, in accordance with a  
431       permit issued by the commissioner; and (4) file a permit application to  
432       modify the schedule of operations at such source, pursuant to section  
433       (11) of this act, in accordance with a permit issued by the  
434       commissioner.

435 (b) On October 1, 2003, and during the period from October first to  
436 April thirtieth, inclusive, each year thereafter, the owner or operator of  
437 a stationary source subject to this section that is also a NOx budget  
438 program source shall:

439 (1) Comply with the emission limitation in subsection (c) of section  
440 (8) of this act; or

441 (2) Use NOx DERCs, or NOx allowances, or both, pursuant to  
442 section 12 of this act, to achieve all or a portion of the NOx emission  
443 reductions required by the emission limitation in subsection (c) of  
444 section 8 of this act.

445 (c) The owner or operator of a stationary source subject to this  
446 section, in accordance with an order or permit issued by the  
447 commissioner, may use NOx DERCs and NOx allowances, pursuant to  
448 section (12) of this act, to achieve all or a portion of the reductions  
449 required by this section. The commissioner shall submit such permit or  
450 order to the Environmental Protection Agency Administrator for  
451 approval in accordance with the provision of 42 USC 7401-7671q.

452 (d) Nothing herein shall preclude the commissioner from issuing an  
453 order to an owner or operator of a stationary source subject to this  
454 section to comply with the requirements of this subsection.

455 Sec. 8. (NEW) (a) The owner or operator of a stationary source  
456 subject to this section may, in accordance with subdivision (1) of  
457 subsection (a) of section 7 of this act, of this section, comply with the  
458 requirements of this section by meeting applicable emission limitations  
459 specified in the Nitrogen Oxide Table in subsection (d) of this section.  
460 Emission limitations in said table for turbine engines that are  
461 quantified in units of ppmvd shall be corrected to fifteen per cent  
462 oxygen.

463 (b) For any stationary source for which there is no applicable  
464 emission limitation in the Nitrogen Oxide Table in subsection (d) of



465 this section, the owner or operator of such source shall not cause or  
466 allow emissions of NO<sub>x</sub> therefrom in excess of the following:

467 (1) For fuel-burning equipment fired by a fuel other than those fuels  
468 cited in said table: 0.3 pounds per MMBTU;

469 (2) For any waste combustor subject to the requirements of  
470 subsection (d) of this section: 0.38 pounds per MMBTU;

471 (3) For any waste combustor not subject to the requirements of  
472 subdivision (2) of this subsection which has a waterwall furnace: 0.38  
473 pounds per MMBTU;

474 (4) For any other waste combustor: 0.33 pounds per MMBTU;

475 (5) For a glass melting furnace: 5.5 pounds of NO<sub>x</sub> per ton of glass  
476 produced;

477 (6) For a stationary source, other than a glass melting furnace, that  
478 combusts fuel for heating materials: 180 ppmvd, corrected to twelve  
479 per cent carbon dioxide; or

480 (7) For any stationary source not having an emission limitation in  
481 subdivision (1) to (6), inclusive, of this subsection: seven hundred  
482 ppmvd.

483 (c) For a source subject to this section that is also a NO<sub>x</sub> budget  
484 program source: 0.15 pounds per MMBTU during the period from  
485 October first to April thirtieth, inclusive.

486 (d) In addition to complying with the emission limitation in  
487 subdivision (2) of subsection (b) of this section, by May 31, 1995, the  
488 owner or operator of any waste combustor that combusts refuse  
489 derived fuel shall install and operate selective noncatalytic reduction  
490 or other NO<sub>x</sub> emissions control technology capable of reducing the  
491 NO<sub>x</sub> emission rate by at least thirty per cent from the average emission  
492 rate in calendar year 1990 on one boiler unit at such facility. If the

493 commissioner determines that operations during 1990 were not  
 494 representative of normal operations of the facility, the commissioner  
 495 may use another calendar period that is more representative. In  
 496 addition, actual annual average NOx emissions from other boiler units  
 497 at such facility shall each not exceed 420 tons per year. The  
 498 commissioner may consider, in the same manner as for other sources,  
 499 any emission reduction below 0.38 pounds per MMBTU to be eligible  
 500 as surplus emissions reductions for purposes of emission reduction  
 501 credits pursuant to section 12 of this act until May 31, 1999.

T1		<b>Gas-fired</b>	<b>Residual-oil-fired</b>	<b>Other-oil-fired</b>	<b>Coal-fired</b>
T2	<b>Turbine engine with MRC <math>\square</math> 100 MMBTU/hr</b>	55 ppmvd	not applicable	75 ppmvd	not applicable
T3	<b>Turbine engine with MRC &lt; 100 MMBTU/hr</b>	0.90 lb/MMBTU	not applicable	0.90 lb/MMBTU	not applicable
T4	<b>Cyclone furnace</b>	0.43 lb/MMBTU	0.43 lb/MMBTU	0.43 lb/MMBTU	0.43 lb/MMBTU
T5	<b>Fast-response double-furnace Naval boiler</b>	0.20 lb/MMBTU	0.30 lb/MMBTU	0.30 lb/MMBTU	0.30 lb/MMBTU
T6	<b>Fluidized bed combustor</b>	not applicable	not applicable	not applicable	0.29 lb/MMBTU
T7	<b>Other boiler</b>	0.20 lb/MMBTU	0.25 lb/MMBTU	0.20 lb/MMBTU	0.38 lb/MMBTU

T8	<b>Reciprocating engine</b>	2.5 gm/bk hp-hr	not applicable	8 gm/bk hp-hr	not applicable
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502 (a) When, pursuant to subdivision (2) of subsection (a) of section 7  
503 of this act, the owner or operator of a stationary source subject to this  
504 section switches the use of fuel, converts to a new fuel, or is capable of  
505 burning two or more different fuels, such owner or operator shall  
506 comply with the requirements of this subsection.

507 (b) The owner or operator of a stationary source that is capable of  
508 firing two or more fuels shall not cause or allow emissions of NOx  
509 from such source, in excess of the following:

510 (1) For fuel-burning equipment that simultaneously fires two or  
511 more different fuels: An emission limitation calculated by (A)  
512 multiplying the heat input of each fuel combusted by the emission  
513 limitation established in this section for such fuel, (B) summing those  
514 products, and (C) dividing the sum by the total heat input; or

515 (2) For fuel-burning equipment that is capable of interchangeably  
516 firing two or more fuels: the emission limitation in the Nitrogen Oxide  
517 Table in subsection (d) of section 8 of this act for the particular  
518 equipment and fuel used. Notwithstanding this requirement, the  
519 owner or operator of a stationary source that operates exclusively on  
520 other oil or gas from May first through September thirtieth, inclusive,  
521 of any year and on another fuel during the remainder of the year shall  
522 not cause or allow emissions of NOx from such source in excess of 0.2  
523 pounds per MMBTU from May first to September thirtieth, inclusive,  
524 and 0.29 pounds per MMBTU for the remainder of the year.

525 (c) The owner or operator of a stationary source that, on or after  
526 January 1, 1990, converts the fuel used at such source, shall not cause  
527 or allow emissions of NOx from such source in excess of the following:

528 (1) 0.29 pounds per MMBTU, when such source burned coal to  
529 provide more than fifty per cent of its total heat input during the last

530 full calendar year immediately prior to such conversion; or

531 (2) 0.225 pounds per MMBTU, if such source burned residual oil to  
532 provide more than fifty per cent of its total heat input during the last  
533 full calendar year immediately prior to such conversion.

534 Sec. 10. (NEW) (a) When the owner or operator of a stationary  
535 source subject to this section reduces the NOx emission rate from such  
536 source by forty per cent, as provided in subdivision (3) of subsection  
537 (a) of section 7 of this act, such owner or operator shall comply with  
538 the emission limitations of this section established in a permit issued  
539 by the commissioner. Such permit shall specify such source's NOx  
540 emission limitation to be the more restrictive of:

541 (1) Sixty per cent of such source's emission rate at maximum  
542 capacity during calendar year 1990; or

543 (2) Sixty per cent of the emission limitation applicable to the source  
544 on January 1, 1990. Such permit shall express the NOx emission  
545 limitation in the same units of measurement as the NOx emission  
546 limitation that would otherwise apply to such source in subsection (e)  
547 of this section.

548 (b) To determine the actual emission rate specified in subdivision (1)  
549 of subsection (a) of this section, such owner or operator shall conduct  
550 an emission test at such source under operating conditions  
551 representative of those conditions in existence at the source in calendar  
552 year 1990, at the maximum capacity at which the source was operated  
553 during such calendar year.

554 (c) If the Commissioner determines that operations during calendar  
555 year 1990 were not representative of normal operations from such  
556 source, the Commissioner may use another calendar year which is  
557 more representative.

558 Sec. 11. (NEW) (a) If the owner or operator of a stationary source  
559 subject to this section proves to the satisfaction of the commissioner

560 that it is not technologically or economically feasible for such source to  
561 comply with the emission limitations in subsections (e) through (g) of  
562 this section, except the emission limitation in subsection (e)(3) of this  
563 section, the Commissioner may by permit require NOx emission  
564 reductions through modifications of the schedule of NOx-emitting  
565 activities and implementation of other measures to reduce NOx  
566 emissions at such source. Such permit may include restrictions on  
567 operations on any day for which the Commissioner has forecast that  
568 ozone levels will be "moderate to unhealthy," "unhealthy," or  
569 "very unhealthy."

570 (b) This subsection shall only apply to the following:

571 (1) Oil-fired turbine engines or fast-response double-furnace Naval  
572 boilers that generate power to create simulated high-altitude  
573 atmospheres for the testing of aircraft engines;

574 (2) Testing of fuel-burning equipment undergoing research and  
575 development; or

576 (3) Compression-ignition reciprocating engines used exclusively for  
577 the training of personnel in the operation and maintenance of such  
578 engines aboard submarines.

579 Sec. 12. (NEW) (a) The owner or operator of a stationary source  
580 subject to this section may use NOx DERCS or NOx allowances or both  
581 to comply with the applicable emission limitation contained in  
582 subsection (e) of this section pursuant to a permit or order issued by  
583 the commissioner.

584 (b) Such owner or operator shall retire one (1) NOx DERC or one (1)  
585 NOx allowance for each ton of NOx emitted in excess of the applicable  
586 emission limitation in subsection (e) of this section, as calculated  
587 pursuant to a permit or order issued by the commissioner. Such  
588 owner or operator shall conduct an emission test or submit another  
589 method acceptable to the Commissioner to estimate the number of tons

590 of NOx emitted in excess of such applicable emission limitation. Such  
591 emission test shall be conducted under operating conditions that  
592 demonstrate the maximum emission rate of such source. Such  
593 emission test shall be certified pursuant to subsection (k) of this  
594 section.

595 (c) Any creation or use of NOx DERCs or NOx allowances for the  
596 purpose of this subsection shall be consistent with the provisions of 40  
597 CFR 51, Subpart U and the U.S. Environmental Protection Agency's  
598 "Emissions Trading Policy Statement," published December 4, 1986  
599 (Federal Register, Volume 51, page 43814). The use of NOx allowances  
600 pursuant to this subsection shall also be consistent with the provisions  
601 of section 22a-174-22a(f)(4) and section 22a-174-22b(i)(5) of the  
602 Regulations of Connecticut State Agencies.

603 Sec. 13. (NEW) (a) The owner or operator of a stationary source  
604 subject to an emission limitation under this section shall conduct an  
605 emission test to demonstrate compliance with this section no later than  
606 May 31, 1995. Any such owner or operator that does not install or  
607 operate a continuous emissions monitor at such source shall also  
608 conduct emission tests at least once every five years. Compliance with  
609 the emission limitations of this section shall be determined based on  
610 the average of three (3) one-hour tests, each performed over a  
611 consecutive 60-minute period and performed in accordance with  
612 section 22a-174-5 of the Regulations of Connecticut State Agencies.  
613 Any analysis of nitrogen content conducted as part of such emission  
614 testing shall be in accordance with Method D-3228 of the American  
615 Society for the Testing of Materials.

616 (b) The owner or operator shall demonstrate compliance with  
617 emission limitations of this section using sampling and analytical  
618 procedures approved under 40 CFR Part 60, Appendix A, or under  
619 procedures in subsection 22a-174-5(d) of the Regulations of  
620 Connecticut State Agencies. Sampling shall be conducted when the  
621 source is at normal operating temperature and, unless allowed

622 otherwise by the Commissioner in a permit or order, is operating at or  
623 above ninety percent (90%) of maximum rated capacity for a fuel-  
624 burning source or at or above ninety percent (90%) of design capacity  
625 for a waste combustor. Notwithstanding such requirement, any source  
626 which has operated in excess of one hundred percent (100%) of its  
627 maximum rated capacity at any time since January 1, 1990 shall be  
628 tested when the source is operating at or above ninety percent (90%) of  
629 its highest operating rate since January 1, 1990.

630 (c) On and after May 31, 1995, the owner or operator of any source  
631 that emitted more than one hundred (100) tons of NOx from a single  
632 stack during any calendar year beginning January 1, 1990, shall install,  
633 calibrate, maintain, operate, and certify a continuous emissions  
634 monitor for NOx for each such stack. The owner or operator shall  
635 notify the Commissioner in writing at least thirty (30) days prior to  
636 conducting any performance or quality assurance testing of any such  
637 monitor. Any such testing shall be conducted in accordance with a  
638 testing protocol approved by the Commissioner. Any continuous  
639 emission monitor for NOx shall be installed, calibrated and operated in  
640 accordance with the performance and quality assurance specifications  
641 contained in 40 CFR 60, Subpart A, Appendix B and Appendix F.

642 (d) Unless otherwise specified by the commissioner in a permit or  
643 order, the averaging times for the following emission limitations shall  
644 be applicable to a source that has or is required to have a continuous  
645 emissions monitor for NOx:

646 (1) For the emissions limitation is subsection (e)(3), the period from  
647 October 1 to April 30, inclusive, including all periods of operation,  
648 including startup shutdown, and malfunction; and

649 (2) For any other emission limitation contained in this section,  
650 twenty-four (24) hours, measured from midnight at the beginning of  
651 any day to midnight of the end of that day, including all periods of  
652 operation, including startup, shutdown, and malfunction.

653       Sec. 14. (NEW) (a) The owner or operator of a stationary source  
654       subject to this section, shall keep the following records:

655       (1) For an emergency engine, daily records of operating hours of  
656       such engine, identifying the operating hours of emergency and non-  
657       emergency use;

658       (2) For any premises for which subsections (b)(2) or (b)(3) of this  
659       section applies, records (e.g. fuel use, continuous emissions  
660       monitoring, operating hours) to determine whether the NOx emissions  
661       from such premises on any day from May 1 to September 30, inclusive,  
662       are in excess of one hundred thirty-seven (137) pounds for premises  
663       located in a severe nonattainment area for ozone or two hundred  
664       seventy-four (274) pounds for premises located in a serious  
665       nonattainment area for ozone.

666       (3) Monthly and annual records (e.g. fuel use, continuous emissions  
667       monitoring, operating hours) to determine whether NOx emissions  
668       from such premises in any calendar year are in excess of twenty-five  
669       (25) tons for premises located in a severe nonattainment area for ozone  
670       or fifty (50) tons for premises located in a serious nonattainment area  
671       for ozone;

672       (4) Records of all tune-ups, repairs, replacement of parts and other  
673       maintenance;

674       (5) Copies of all documents submitted to the Commissioner  
675       pursuant to this section;

676       (6) For any source required to install, calibrate, and operate a  
677       continuous emissions monitor for NOx under subdivision (k)(3), all  
678       charts, electronically stored data, and printed records produced by  
679       such continuous emissions monitor;

680       (7) Procedures for calculating NOx emission rates in (B) and (C)  
681       above;



682 (8) Records of the dates, times, and places of all emission testing  
683 required by this section, the persons performing the measurements,  
684 the testing methods used, the operating conditions at the time of  
685 testing, and the results of such testing;

686 (9) For any source required to install, calibrate, and operate a  
687 continuous emissions monitor for NO<sub>x</sub> under subdivision (k)(3) of this  
688 section, records of all performance evaluations, calibration checks and  
689 adjustments on such monitor; a record of maintenance procedures; and  
690 all data necessary to complete the quarterly reports required under  
691 subdivision (l)(4) of this section; and

692 (10) Any other records or reports required by an order or permit  
693 issued by the Commissioner pursuant to this section.

694 (b) Within thirty (30) days of the completion of emission tests  
695 conducted under the requirements of subdivision (k)(1) of this section,  
696 the owner or operator of such source shall submit a written report of  
697 the results of such testing to the Commissioner.

698 (c) Within sixty (60) days of the completion of certification tests  
699 conducted under the requirements of subdivision (k)(3) of this section,  
700 the owner or operator of such source shall submit a written report of  
701 the results of such testing to the Commissioner.

702 (d) The owner or operator of any source required to be equipped  
703 with a continuous emissions monitor for NO<sub>x</sub> under subdivision (k)(3)  
704 of this section shall submit to the Commissioner written quarterly  
705 reports of excess emissions and CEM malfunctions. Such reports shall  
706 be submitted to the Commissioner on or before January 30, April 30,  
707 July 30, and October 30 and shall include data for the three calendar  
708 month period ending the month before the due date of the report. For  
709 each period of excess emissions, such report shall include the date and  
710 time of commencement and completion of such period, the magnitude  
711 and suspected cause of the excess emissions and all actions taken to  
712 correct the excess emissions. For each malfunction of the CEM system,

713 such report shall include the date and time of when the malfunction  
714 commenced and ended, and all actions taken to correct the  
715 malfunction.

716 (e) The owner or operator of a stationary source subject to this  
717 section shall retain all records and reports produced pursuant to the  
718 requirements of this section for five (5) years. Such records and  
719 reports shall be available for inspection at reasonable hours by the  
720 Commissioner or the Administrator. Such records and reports shall be  
721 retained at the source, unless the Commissioner approves in writing  
722 the use of another location in the State.

723 (f) On or before April 15 of each year, the owner or operator of a  
724 stationary source subject to this section shall submit a report on NO<sub>x</sub>  
725 emissions from such source, on a form provided by the Commissioner.

726 (g) The Commissioner may use data recorded by continuous  
727 emissions monitors for NO<sub>x</sub> and any other records and reports to  
728 determine compliance with applicable requirements of this section.

729 Sec. 15. (NEW) (a) The owner or operator of a stationary source  
730 subject to this section shall submit a compliance plan to the  
731 Commissioner by September 1, 1994, on forms provided by the  
732 Commissioner. Such compliance plan shall document how such  
733 source will comply with all applicable requirements of this section.  
734 The owner or operator of a stationary source that becomes subject to  
735 this section after May 1, 1994, shall submit a compliance plan within  
736 four (4) months of the date on which such source becomes subject to  
737 this section.

738 (b) Any compliance plan submitted pursuant to this subsection shall  
739 include a certification signed by a responsible corporate officer or a  
740 duly authorized representative of such officer, as those terms are  
741 defined in subdivision 22a-430-3(b)(2) of the Regulations of  
742 Connecticut State Agencies, and by the individual delegated by such  
743 officer with the responsibility of actually preparing the compliance

744 plan. Such certification shall read as follows: "I have personally  
745 examined and am familiar with the information submitted in this  
746 document and all attachments thereto, and I certify that based on  
747 reasonable investigation, including my inquiry of those individuals  
748 responsible for obtaining the information, the submitted information is  
749 true, accurate and complete to the best of my knowledge and belief. I  
750 understand that any false statement made in the submitted  
751 information may be punishable as a criminal offense under section  
752 22a-175 of the Connecticut General Statutes, under section 53a-157b of  
753 the Connecticut General Statutes, and in accordance with any  
754 applicable statute."

755 (c) If a compliance plan does not contain all measures necessary to  
756 comply with all requirements of this section, the Commissioner may  
757 notify the owner or operator of such source of the deficiency. Such  
758 owner or operator shall resubmit a revised compliance plan within  
759 thirty (30) days of receipt of such notice.

760 (d) Notwithstanding the provisions of subdivision (1) of this section,  
761 the owner or operator of a NOx budget program source who is subject  
762 to a revised emission standard shall not be required to submit a  
763 revised compliance plan unless the commissioner requests so in  
764 writing.

***Statement of Purpose:***

To codify the regulations adopted by the Department of  
Environmental Protection.

*[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]*